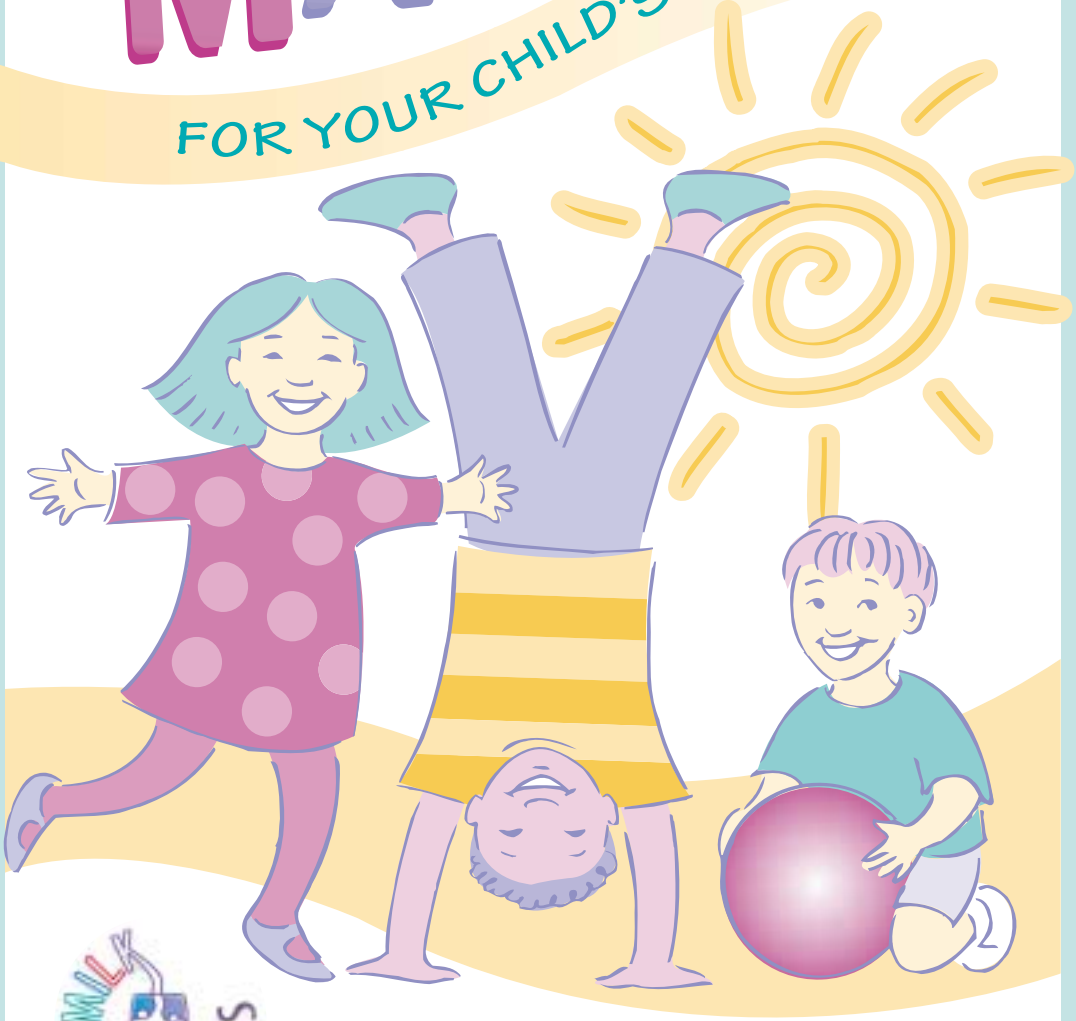
MILK MATTERS

FOR YOUR CHILD'S HEALTH!



NATIONAL INSTITUTES OF HEALTH
National Institute of Child Health and Human Development

Dear Parent,

Your child's bones are growing every day, and growing bones need lots of calcium. Milk is an excellent source of calcium.

We hope that this book will help you learn more about milk and calcium so you can help your children grow into strong, healthy adults.

Sincerely yours,

Duane Alexander, MD

Director, National Institute of Child Health and Human Development

MILK MATTERS

FOR YOUR CHILD'S HEALTH!

That's because milk and dairy foods have lots of calcium and other nutrients that make bones grow strong and healthy. Children and teenagers especially need the calcium and other bone building materials in milk because their bones are growing more than at any other time in their lives.

Studies show that most kids don't get the calcium they need. In fact, more than half of teenage boys and girls don't get the recommended amount of calcium.

Why Do Kids Need Calcium?

Calcium is a mineral found in many foods that does lots of good things for the body.

Calcium makes bones strong. Bones may seem hard and lifeless. But they are actually growing and alive. Since bones grow most during the childhood and teenage years, these are especially important times to give them the calcium they need. By eating and drinking lots of foods with calcium, children and teens can help build their "bone banks" to store calcium to keep bones strong for the rest of their lives.

Calcium helps reduce the risk of osteoporosis. Osteoporosis is a condition that makes bones become weak and break more easily. Getting enough calcium as children or teens can help protect against osteoporosis. Although the effects of osteoporosis might not show up until we are adults, kids need to get enough calcium when they are young to help prevent it.

Calcium makes the whole mouth healthy. Calcium keeps teeth strong and healthy throughout life. Even before baby and adult teeth come in they need calcium to develop fully. And after teeth come in they stay strong and resist decay by taking in calcium. Calcium also makes gums healthy. Getting enough calcium as a young adult may help prevent gum disease later in life. And calcium makes jawbones strong and healthy, too.

Bones also need exercise to become stronger. Playing sports, running, jumping, or dancing, for example, helps makes bones stronger.

HOW MUCH CALCIUM
Does My Child Need?

AGE	CALCIUM needed each day (in milligrams)
Birth to 6 months	210 mg
6-12 months	270 mg
1-3 years	500 mg
4-8 years	800 mg
9-18 years	1,300 mg
19-50 years	1,000 mg

Source: Dietary Reference Intakes for Calcium, National Academy of Sciences, 1997

WHERE IS . . .

FOOD	SERVING SIZE	CALCIUM in Milligrams*	% Daily Value on Food Label*
Plain yogurt, fat-free	1 cup	450	45%
Frozen yogurt, fat-free, calcium-fortified	1/2 cup	450	45%
American cheese	2 ounces	350	35%
Ricotta cheese, part skim	1/2 cup	337	30%
Yogurt with fruit	1 cup	315	30%
Cheddar cheese	1 ounce	200	20%
Milk (fat-free, low-fat, whole, or lactose-free)	1 cup	300	30%
Orange juice with added calcium	1 cup	300	30%
Tofu (made with calcium-sulfate)	1/2 cup	260	25%

. . . THE CALCIUM?

FOOD	SERVING SIZE	CALCIUM in Milligrams*	% Daily Value on Food Label*
Soy milk, calcium-fortified	1 cup	250-300	25-30%
Cheese pizza	1 slice	220	20%
Macaroni & cheese	1/2 cup	180	18%
Corn tortilla	3 tortillas	132	10%
Broccoli, cooked or fresh	1 cup	90	9%
Soybeans, cooked	1/2 cup	90	9%
Almonds, dry roasted	1 ounce	80	8%
Bok choy, boiled	1/2 cup	80	8%
White bread	1 slice	30	3%

** Calcium content varies depending on the ingredients for many foods. % Daily Values have been rounded according to Food and Drug Administration guidelines.*

Sources for Calcium Food Table : American Dietetic Association's Complete Food and Nutrition Guide, 1996; Bowes and Church's Food Values of Portions Commonly Used, 1998. Some values have been rounded.

Where Can Kids Get Calcium?

Milk and other dairy foods, such as cheese and yogurt, are excellent sources of calcium. One 8-ounce glass of milk has about 300 milligrams (mg) of calcium. Just a few glasses can go a long way toward giving kids the calcium they need each day.

Milk also has other vitamins and minerals that are good for bones and teeth. One especially important nutrient is vitamin D, which helps the body to absorb more calcium.

Other sources of calcium include dark green, leafy vegetables, such as kale, and foods like broccoli, soybeans, tofu made with calcium, orange juice with calcium added, and other calcium-fortified foods.

IDEAS **for high-calcium meals & snacks**

BREAKFAST

Pour milk over your breakfast cereal

Have a cup of low-fat yogurt

Drink a glass of calcium-fortified orange juice

Add low-fat milk instead of water to oatmeal and hot cereal

LUNCH

Add milk instead of water to tomato soup

Add cheese to a sandwich

Have a glass of milk instead of a soda

Make mini-pizzas or macaroni and cheese

SNACK

Try flavored milk like chocolate or strawberry

Have a frozen yogurt

Try some pudding made with milk

Make a "smoothie" with fruit, ice, and milk

Dip fruits and vegetables into yogurt

DINNER

Make a salad with dark green, leafy vegetables

Serve broccoli or cooked, dry beans as a side dish

Top salads, soups, and stews with low-fat shredded cheese

Add tofu made with calcium to stir fry and other dishes

Sources include American Dietetic Association's Complete Food and Nutrition Guide, 1996

Food Nutrition Labels

Reading the food label can be an easy way to find out how much calcium is in one serving of food. For example, one 8-ounce serving of milk has 300 mg of calcium, or 30% of the Daily Value (DV). By looking on the food label, you can see how much calcium is in a food serving.

Here is an example of a food nutrition label. The label shows that this brand of frozen yogurt with calcium added has 45% of the Daily Value for calcium in each serving (there are about 16 servings of frozen yogurt in this container).

Nutrition Facts

Serving Size 1/2 cup (67g)
Servings Per Container 16

Amount Per Serving	
Calories 100	Calories from Fat 0
	% Daily Value
Total Fat 0g	0%
Saturated Fat 0g	0%
Cholesterol 0g	0%
Sodium 60mg	3%
Total Carbohydrate 22g	7%
Dietary Fiber 0g	
Sugars 15g	
Protein 3g	

Vitamin A	2%	* Vitamin C	0%
Calcium	45%	* Iron	0%

* Percent Daily Values are based on a 2,000 calorie diet.

100% of the Daily Value is equal to 1,000 mg of calcium a day. However, children ages 9-18 need extra calcium to keep their bones growing strong and healthy. They should be getting 1,300 mg of calcium a day, or 130% of the Daily Value.

Because the food label does not list calcium in milligrams, the easiest way to tell if kids 9-18 are getting enough is by making sure the Daily Values for calcium add up to 130% each day.

Here is an example of how to get 1300 mg (130% DV) of calcium per day:

FOOD	Milligrams of CALCIUM	% Daily Value (DV) listed on the food label
1 (8-oz) glass milk	300 mg	30% DV
1 (8-oz) cup yogurt	300 mg	30% DV
1 1/2 ounces cheddar cheese	300 mg	30% DV
1 (8-oz) glass calcium-fortified o.j.	300 mg	30% DV
3 corn tortillas	100 mg	10% DV
	TOTAL Calcium: 1300 mg	TOTAL DV: 130% DV

Another way to figure out how much calcium your child is getting is to add a "zero" to the end of the Daily Value number (or multiply by 10). This will show you what the Daily Value equals in milligrams of calcium. For example, a serving of milk that has a Daily Value of 30% has 300 mg of calcium.

The food label can also help you choose between foods if you look to see which ones have the most calcium. A food serving with a Daily Value of 20% or more is high in calcium. A food serving with a Daily Value less than 5% is low in calcium. By looking at the labels, you can pick the foods that have the most calcium in them to help your child build strong bones.

What Kind of Milk is Best?

Fat-free (skim) and low-fat (1%) milk and dairy products have no or little fat so it's easy for kids to get enough calcium without adding extra fat to their diets. However, babies under one year old should drink only breast milk or iron-fortified formula. Children ages one to two should drink whole milk rather than reduced-fat varieties.* Between ages two and five, parents should gradually switch children to reduced-fat, low-fat, or fat-free milk.

** Source: American Academy of Pediatrics, Pediatric Nutrition Handbook, 1998*

ALL have 300 mg of calcium per glass — But they have different amounts of fat. 8 ounces of whole milk contains 8 grams of fat; reduced-fat milk has 5 grams of fat: low-fat milk has 2.5 grams of fat; and fat-free milk has 0 fat.

Can Everyone Drink Milk?

Lactose is the sugar found in milk and dairy products and can cause stomach discomfort in some people. A person with lactose intolerance has trouble digesting the sugar in dairy foods. Lactose intolerance is not common among infants and children. Among adults, it is more common in Asian, Hispanic, African-American, and Native American populations.

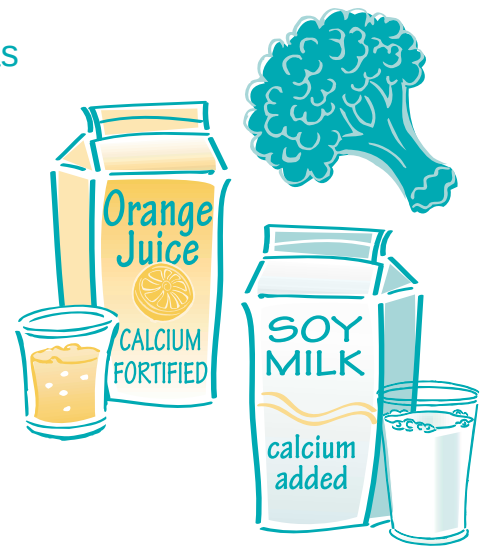
In general, people who have problems with lactose (lactose intolerance) can eat or drink:

- An 8-ounce glass of milk with meals without getting an upset stomach
- Yogurt or cheese
- Milk with other foods such as cereal or cookies, instead of drinking it on an empty stomach

- Lactose-free milk
- Milk containing lactose after taking pills or drops that help digest the lactose in milk and dairy products

People who are allergic to milk and dairy products generally can eat or drink calcium from:

- Vegetables such as broccoli and kale
- Calcium-fortified orange juice
- Soy milk with calcium added
- Calcium supplements



If you or your children have problems with lactose or are allergic to milk, talk to your doctor.

Getting Enough Calcium

Getting enough calcium is important for building strong bones and teeth and ensuring future health. Here are three things that parents can do to help kids get enough calcium:

1. **Offer your child …**

   healthy foods filled with calcium, such as low-fat or fat-free milk and dairy products, and dark green, leafy vegetables.

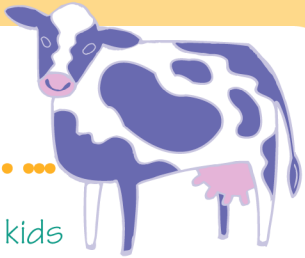
2. **Keep milk, dairy products, and foods with calcium in the house…**

   and put milk on the table during meals and snacks.

3. **Drink milk yourself …**

   and make it part of your whole family's diet. Kids make many food choices by watching their parents so show them milk and calcium are important your whole life long.

Count Your Calcium!



Copy this chart and fill it out with your kids to help keep track of how much calcium they get each day.

Food	Calcium *(in milligrams)*	% Daily Value

TOTAL MILLIGRAMS OF CALCIUM TODAY

NICHD/Milk Matters Clearinghouse
P.O. Box 3006
Rockville, MD 20847
Phone: 1-800-370-2943
Fax: 301-496-7101

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